

Descriptions of some new species of Insects, with observations on described species.

By S. S. HALDEMAN.

CINCINDELA LECONTEI Hald. Dull cupreous, beneath green, with cupreous reflexions; white pubescent; head rugulose, longitudinally upon the front, and transversely behind; labrum white, anterior margin blackish, short, transverse, strongly tridentate in the middle; palpi blackish green. Prothorax minutely wrinkled, narrowed posteriorly, disc convex, transverse impressions and dorsal line profound. Elytra convex, nearly double the width of the base of the prothorax, finely and obsolete punctured, with an irregular stria of large punctures, base greenish; lunules submarginal, distinct, and yellowish white, the humeral one rectilinear, and extending to one-fourth the length of the elytra, where it is incrassated on the inner side, touching the medial fascia, which is triangular, with the apex extending one third of the distance towards the suture; the apical lunule is bent at a right angle, and reaches the suture.

Allied to *C. rugitrons* and *C. scutellaris*, resembling the latter in the character of the prothorax, and differing from the former in having the humeral lunule entire.

Wisconsin, Guex. Cab. Le Conte.

C. ANCOCONSENSIS Harris. "Upper lip 3-toothed, thorax narrowed behind. Bronzed blackish brown above, with white humeral and terminal lunule, and intermediate angular band enlarged on the margin; body beneath green, tail purple." Harris.

Form rather slender, head tinged with metallic green, longitudinally rugulose, especially upon the orbits; front with distant impressed shallow punctures; labrum white or discolored, the margin obscure, strongly 3-toothed, with an obsolete tooth on each side; mandibles black, with the base white; antennæ and palpi metallic green and blue, with white hairs. Prothorax as wide as the eyes, and with the scutel, minutely scabrous, anterior, posterior and dorsal lines well impressed with metallic green, lateral margins punctate. Elytra minutely punctate with blue or green impressed microscopic points, with an indistinct subsutural irregular line of larger distinct punctures, and one or two very short similar lines on the humerus. Humeral lunule curving slightly inwards posteriorly, terminal lunule abruptly enlarged anteriorly, sometimes continuous with the marginal portion of the middle fascia, which is behind the middle of the elytron, extending transversely less than half the distance towards the suture, and bent backward and inward, terminating in an enlargement near the suture. Beneath and feet green, with white hairs. In the male the base of the maxillary palpi is yellow.

New Hampshire, Dr. Harris; Philadelphia, Schafhirt; Cab. Le Conte.

EVARTHUS GRAVIDUS. Black, somewhat shining, robust and depressed, prothorax transverse, lateral margins reflexed, broadly rounded, slightly sinuate posteriorly, dorsal and anterior line impressed, basal angles square, with two well impressed longitudinal striæ, the surface of this part and the posterior part of the dorsal line being marked with irregular waved transverse striæ. Elytral striæ well impressed, finely punctured toward the base, except the submarginal ocellate row, interstices slightly convex. Length $10\frac{1}{2}$, breadth (elytra) 4 lines.

Var. α . Interstices of the elytra smooth, with the punctures more distinct.

Var. ζ . Elytra smooth, the striæ and punctures indistinct.

This species adds a group (2f.) to the five of Le Conte, given in the Journ. Acad. Nat. Sci. 2d ser. 2, 227, and establishes a complete parallelism between the two divisions of the genus *Evarthrus* formed by him, the relations between the sections 2e and 2f, being equivalent to those between 1a and 1b. The characters of group f. are: Elytrorum striis non approximatis, thorace quadrato, postice utrinque bi-impresso.

EVARTHUS HEROS Say, (*Feronia*) Journ. Acad. Nat. Sc. 3, 145. Since Dr. Le Conte alluded to this species, Journ. Acad. 2d ser., 2, 223, specimens have

been obtained which show that *E. colossus* Lec. is a distinct species, and that the former belongs to the section of the latter.

BOLBOCERUS FOSSATUS, ♂ Bright pale ferruginous; clipeus prominent, confluent punctured, its disc concave at the end by the elevation of the margin, sides parallel, anterior margin with three teeth, one medial, bounded by an obtuse emargination which forms the lateral teeth at the anterior angles; anterior canthus of the eye prominent. Pronotum with two horns above directed laterally, and slightly forwards, their posterior margin curving in a sharply defined semicircle, and forming an additional obtuse tooth on each side, which bounds a deep fossa anterior to it. Surface confluent punctured, particularly in the depressed portions, the prominent part above and posteriorly being smooth and shining. Lateral margin finely crenulate, with a slight emargination over the anterior angles; dorsal line distinctly impressed. Scutel sparsely punctured. Elytra paler posteriorly, and finely striate, the striæ with fine punctures. Inferior parts of the body paler than above; clypeus, mandibles, maxillæ and serrations of the anterior feet margined with black. Length $8\frac{1}{2}$ lines.

Texas, Lt. H. Haldeman.

B. LAPORTII. I propose to give this name to *Bolbocerus ferrugineus*|| Laporte, An. Art. Col. 2, 104, Westwood, Lin. Trans. vol. 21, p. 21. It is an East Indian species, and not the true American *Scarab. ferrugineus* of Beauvois, 1805, Ins. 90, tab. 20, fig. 3. *Scarab. ferrugineus* Oliv. 1789, Ins. 1, 9, 3, p. 184, tab. 23, fig. 202, belongs to a different genus.

B. VESTUUDI. This name is proposed for *Bolbocerus furcicollis*† Westwood, an East Indian species, confounded with the North American *B. furcicollis* Lap., itself a synonym of *B. ferrugineus* Beauv., and *B. lecontei*† Dej. Cat., as Dr. Le Conte has informed me.

GEOTRUPES OPACUS Hald. Purple black with scarcely any lustre. Head scabrous, except a small spot on the vertex, with scattered punctures; clypeus regularly rounded, front with three straight radiating lines starting from one impression, the posterior one short and medial, the anterior ones running to the margin, and enclosing a small central tubercle in the angle which they form; pronotum with irregularly scattered impressed punctures, less sparse in the dorsal line, which is slightly impressed posteriorly; punctures becoming less sparse toward the lateral margins, where they are subconfluent; lateral fovea present, scutel punctate. Elytra smooth, scarcely striate, but marked by 16 somewhat irregular rows of fine punctures. Pygidium scabrous, 8 lines long.

Western Texas. Distinguished from *G. blackburnii* Fabr. by the want of lustre, and the striæ which connect the elytral punctures being evanescent, and in some parts wanting.

ENOPLIUM QUADRINOTATUM Hald. Rufous, with four elytral spots arranged in a square; surface scabrous, hirsute with black hairs. Head and prothorax rufous above and below. Front with a transverse impression between the anterior angle of the eyes; palpi, antennæ, a spot on the vertex, feet, pectus and abdomen shining black. Prothorax longer than wide, the sides convex, projecting most behind the middle; an evanescent black spot in front of the scutel. Elytra each with two conspicuous round black spots, one a little anterior to the middle, the other more than midway between the former and the apex. The size of the spots exceeds one third the width of the elytron. 3 lines long.

Texas. Bears some resemblance to *E. 4-punctatum* Say; but that species has a black head and prothorax. As in that species the antennæ are 10-articulate.

Genus SANDALUS Knoch, 1801.

S. NIGER Knoch, 1801. N. Beiträge, 110, ♀. *S. Knochii* Guérin, 1843, Species et Icon. des An. Art. No. 4, p. 4, fig. 1 ♂; fig. 2 ♀. *S. rubidus* Mels. 1815, Proc. Acad. 2, 220, ♂. *Rhipicera rufipennis*† Dej. Cat. Guérin was the first to point out the male of this species in certain specimens with fusco-rufous

elytra, described as *S. rubidus* by Dr. Melsheimer, who, however, suspected that they might be the male of *S. niger*. Both sexes vary in size, the dorsal line is sometimes impressed in both, and the distinctness of the raised lines of the elytra differs in each.

S. PETROPHYA Knoch, 1801. N. Beitr. 131. Guér. Sp. No. 4. *Rhipicera fulva* Lap. 1834, Ann. Ent. France, 3, 326. *Rh. proserpina* Newman, 1838, Ent. Mag. 5, 383. Male considerably smaller than the female, and with the elytra slightly narrowing posteriorly instead of being widest behind the middle, as in the female. Black, with an indistinct yellowish pubescence. Mandibles black, antennæ dark rufous, base black; head and pronotum finely scabrous, the width of the latter about double its length, sides convex, subangular behind the middle, dorsal line impressed or wanting. Scutel circular, minutely scabrous. Elytra but little wider than the prothorax, slightly tapering posteriorly, surface deeply and coarsely punctured in irregular longitudinal series, leaving interstitial raised lines, which are most regular between each pair of the punctured lines. Tarsi with fulvous hair beneath, ungues reddish. Length $5\frac{1}{2}$ lines, elytra 4, pronotum 1 in length and $1\frac{1}{2}$ in breadth. In case *S. brevicollis* Mels., 1845, Proc. Acad. Nat. Sc. 2, 220, is a distinct species, it will be difficult to determine whether the male here described appertains to it or to *S. petrophya*. I think, however, that *S. brevicollis* has no sufficient character to separate it from *S. petrophya*.

SANDALUS SCABRICOLLIS Hald. ♀ Black, sides of the prothorax punctate scabrous, convex before the middle and concave behind it, so as to be slightly sinuous. Length $4\frac{1}{2}$ lines, elytra $3\frac{1}{2}$. Cab. Le Conte.

The prothorax is more coarsely punctured than in *S. niger*, (which has it finely punctulate) and the single specimen observed, besides its small size, has the apex of the elytra slightly compressed externally in a sloping direction.

GENUS *CRYPTOPLEURA* Lec. Journ. Acad. 2d ser. 2, 6.

Head small, mandibles acute, palpi with the last joint somewhat enlarging towards the end, eyes subreniform, antennæ short and slender, 1st and 5th articulations rather longer than any of the rest. Prothorax subglobular, mesosternum protuberant. Scutel rounded posteriorly. Elytra rather slender, wider than the prothorax, narrowing gradually towards the apex; humeri prominent, sides sinuate near the base. Feet weak, femora slightly incrassated towards the apex.

C. GRATA Hald. Shining black; head, mandibles, thorax and scutel slightly sericeous with yellowish hair; labrum and palpi rufous, front flat, medial line slightly raised. Thorax finely and sparsely punctured. Elytra with fine and sparse piliferous punctures, apex truncate, marked each with 4 orange spots; the 1st longitudinal, basal and medial; the 2d before the middle, and marginal; the 3d medial and subsutural; and the 4th immediately behind the 3d. The 3 latter are irregular and confluent. Tibiæ, tarsi and base of the femora rufous. 8 lines long, humeri 4 wide.

Tampico, Mexico, Lieut. H. Haldeman.

TIMARCHA INTRICATA. Oblong convex, black, shining, scabrous with confluent impressed punctures, which are coarsest upon the elytra. Head irregularly and densely punctate, front concave, with an indistinct fovea on each side; antennæ with the penult articulation extending to the base of the pronotum, exterior articulations clothed with short brown hairs. Pronotum transverse, apex broadly emarginate, medial portion rectilinear; base sub-sinuate; sides very convex, narrowed posteriorly, basal angles acute; surface varied with irregular shallow impressions, and densely and irregularly punctate. Scutel with a few punctures. Elytra scabrous with large confluent punctures, the interstices irregular and finely punctate, humeral angle rectilinear and obtuse. Inferior surface less densely punctate, punctures of the feet fine. Less than 5 lines long.

Oregon, J. K. Townsend.

I have adopted the name applied in Dr. Le Conte's Cabinet.

T. INTERTEXTA. General characters of *T. intricata*. Frontal base obtusely impressed, basal angles of the pronotum rectangular; humeral angles obtusely rounded; abdomen sub-opaque, punctures indistinct. 5 lines long.

California, Joshua Child.

Distinguished from *T. intricata* by being more slender, by having the prothorax more transverse, with the sides more sinuous, the antennæ a little longer, a deeper emargination at the base of the elytra and prothorax, the punctures of the elytra more rufose, and the opacity of the abdomen, and less distinctness of its punctures.

BELOSTOMA IMPRESSUM Hald. Variegated dark and pale brown, neurations of the elytra varied with black, with a black stigma at the medial point where they cross. Head short, pronotum sinuous at base, sides sub-sinuous, transverse line rectilinear and obtusely impressed, a fovea in front of it on each side. Two foveæ forming conjointly a V-shaped medial mark at the apex of the pronotum. Scutel with two quadrangles of raised lines, one on each side, the raised dorsal line being common to the two. Inferior surface flavous, mottled with pale brown. Medial and posterior femora and tibiæ with three dark bands; anterior femora robust, simple, the down confined to the anterior margin; caudal appendages not protruded. 23 lines long, 9 wide.

California, Joshua Child.

Allied to *B. haldemanum* Leidy, but distinguished by the dorsal impressions, the lighter color of the inferior surface, and the comparative narrowness of the posterior tibiæ and tarsi.

ZAITHA INDENTATA Hald. Broadly oval, depressed, dark brown, finely scabrous. Head, pronotum and scutel with indistinct patches of very short prostrate flavous hair. Pronotum pyramidal, lateral and anterior margin with an impressed line; apex sinuous, apical angle obtusely rounded, sides rectilinear, base sub-rectilinear, dorsal line raised posteriorly, and impressed anteriorly, transverse posterior line distinctly impressed, portion posterior to it, and anterior portion of the scutel, transversely rugulose; a well impressed fovea (having a raised margin) on each side equidistant between the dorsal line and exterior and anterior margins, a second shallow fovea on each side of the dorsal line anteriorly, conjointly forming a V-shaped figure. Disc of the scutel with irregular rugæ radiating backwards and outwards, medial line impressed. Elytra with distinct cupreous reflexions, neurations very distinct. Feet with lines of silky hair, their surface and the inferior parts of the body covered with short prostrate hair. Length 15, width 8 lines.

California, Dr. Le Conte.

A second specimen has two longitudinal flavous lines on each side of the base. The latter is a female, and the posterior part of the body above is covered with ova.

Distinguished from *Z. bifoveata* Hald. Stansbury's Expedition, 370, tab. 10, fig. 1, by its darker color, broader form, and the greater distinctness of the foveæ on the pronotum.

PHALANGOPSIS SCABRIPES Hald. Flavous mottled with black, especially upon the posterior margin of all the segments, knee joints of all the feet and base of the antennæ, brown. Upper extremity of the femora strongly curved inwards toward the base; externally and above regularly reticulate with blackish, and scabrous with raised points, which are mostly confined to the dark portions; under margin with a row of small spines enlarging posteriorly. Length ♂ 11 lines, antennæ 48, posterior femora 11, tibiæ 12½, tarsi 4½. One specimen taken at Selma, Alabama, by Dr. Hendree.

Resembles *Ph. lapidicola* Burmeister, and *gracilipes* Hald. (Am. Assoc. 1849, p. 336,) in size, but differs from the former by the smaller femoral spines, and from the latter by the scabrous femora.

XVA MIXTA Hald. Shining flavous variegated with brown. Antennæ brown, head flavous punctate, more sparsely above, labrum and a large frontal macula black. Prothorax small and transverse. Elytra flavous, base and apex brown,

less than half the length of the wings, which are pale, with the apex slightly fuliginous, and extending 1 line beyond the abdomen. Anterior feet flavous, tibial palm hirsute, with three terminal spines, internal angle with a slender tarsus (apparently bi-articulate) armed with two slender curved ungues. Medial feet and posterior femora variegated; posterior tibiæ with lamellar appendages as in *X. apicalis*. Abdomen flavous beneath and at the lateral margin, sides and apex brown. 5 lines long to the end of the wings.

Fort Gates, Western Texas, Lt. H. Haldeman.

Resembles *X. apicalis* Say, (which occurs on the Susquehanna) in general appearance, but it is smaller, and the prothorax is much less inflated.

TERMES NIGRICEPS Hald. Body, feet, trophi and antennæ flavous. Head glossy black, sparsely hairy, globose pyriform, projecting anteriorly and ending in a long horn; antennæ 12-articulate; feet slender and hairy. Length $1\frac{1}{2}$ line.

Soldier? with the head larger, sub-globular, unarmed, pale polished brown, front and medial line impressed; antennæ 14-articulate. Length $1\frac{1}{2}$ line.

Western Mexico.

This small species constructs nests apparently of cow's dung, which are attached to the trunks of trees. Dr. Le Conte has seen this or an allied species in Central America. The specimens with the larger head are presumed to be the soldiers.

EUMENES PENNSYLVANICA Hald. Black, with dilated impressed punctures. Hypostoma transversely truncate, with a marginal band of white; a white point at the posterior base of the antennæ, basal articulation of the antennæ with a narrow line of white. Abdominal peduncle small, with a narrow white band near its apex. Segments of the abdomen with a very narrow margin of white. Wings pale fuliginous. Length $5\frac{1}{2}$ lines.

Pennsylvania.

The smallest of our species known to me, and having the mesonotum more coarsely punctate, and the white of the face forming a transverse band anteriorly.

The Committee on Mr. Girard's descriptions of new Nemerteans and Planarians, reported in favor of publication.

Descriptions of new Nemerteans and Planarians from the coast of the Carolinas.

BY CHARLES GIRARD.

The species here described are all marine, and were mostly collected by my friend Wm. Stimpson, on the coast of South Carolina. Aware that I was engaged in researches concerning the natural history of these animals, he very kindly placed them in my hands for description.

The number of species thus added to the American fauna amounts to nine, four of which are new to science and two new to America.

Many of the following descriptions were prepared with the assistance of notes made on the spot by Mr. Stimpson himself, and while the animals were still alive. The coloration and general form are thus more correctly given than if these characters had been derived from the specimens as preserved in alcohol.

There are two forms to which I would direct the attention of naturalists, as they must have an immediate bearing upon the question of the natural affinities of these families either with annelids or with molluscs. I allude to the genus *Imogine* amongst Planarians, and to the genus *Stimpsonia* amongst Nemerteans. The former represents those gastropods which are provided with eyes at the top of their cephalic tentacles, and the latter the nudibranchiated acteons, with an expanded back.